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Report on the intersessional conference on building partnerships for moving towards zero waste

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I. Introduction

1. The Department of Economic and Social Affairs, the United Nations Centre for Regional Development and the Ministry of the Environment of Japan jointly organized the intersessional conference on building partnerships for moving towards zero waste, held in Tokyo from 16 to 18 February 2011. The conference was attended by approximately 180 participants, including representatives of local and national governments, public waste utilities, the private sector, the academic sector and non-governmental organizations. In addition, there were participants from 50 countries in Africa, Asia, Europe, Latin America and the Caribbean, North America and Oceania, and representatives of entities of the United Nations system, including the United Nations Development Programme, the United Nations Environment Programme, the secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Economic and Social Commission for Asia and the Pacific, the United Nations Industrial Development Organization and the World Health Organization, as well as other development agencies and regional organizations.

2. Within the context of the cluster of issues currently being considered by the Commission on Sustainable Development and as a contribution to the Commission's nineteenth session, to be held in 2011, conference participants focused mainly on building partnerships as a basis for sustainable waste management and as an effective means of expanding the waste management services of public waste utilities towards the goal of zero waste.

3. The rising volume of waste and the increasing complexity of waste streams have become major and growing public health and environmental issues, particularly in urban areas of developing countries, that threaten the attainment of the Millennium Development Goals.

4. The concept of zero waste reflects a shared global vision in which resources are used sparingly, efficiently and optimally and systems are in place to ensure that waste is managed effectively and does not have significant negative effects on the health of citizens and the quality of the environment. It represents an aspiration to minimize the use of resources in the manufacture, distribution and use of products consumed by society and to maximize the capture, reuse, recycling and recovery of the intrinsic resource value of the waste generated by society.

5. Moving towards zero waste is inherently a multi-stakeholder process that calls for partnerships within and between communities, businesses, industries and all levels of government. The inclusion of all stakeholders in the process of formulating and implementing policies, strategies and plans is essential to creating the conditions for sustainable partnerships to flourish. Key stakeholders meriting particular attention include women, youth, disadvantaged groups, isolated communities (including mountain and island populations), research establishments, civil society groups, trade unions, the informal sector, waste management industry representatives and industrial and agricultural processing entities.

6. Solid waste management has traditionally been the sole responsibility of local authorities and public waste utilities. However, national Governments play a critical role in establishing the framework conditions for the resource economy to function. Other non-State actors, including the private sector, have an important role to play

in the delivery of the investment, professional and human resources, technology and equipment required to deliver the necessary level of services.

7. Cities typically spend between 5 and 15 per cent of their total budget on solid waste management. In low-income countries, 90 per cent or more of that budget is spent on waste collection alone, although only between 45 and 60 per cent of the waste is actually collected. Providing waste collection services to all people, building on existing recycling systems and raising the environmental standards of waste disposal are major challenges in low-income countries. In many middle-income countries, significant progress has been made in achieving the primary goal of universal collection service coverage and secure disposal. However, there is a need to focus on improving the standards and sustainability of those services and to put into place the policies and mechanisms needed to control the rapidly increasing rate of waste generation. In high-income countries, the situation is markedly different. While services and facilities are largely in place, the major challenge is to continue to innovate, de-link resource use and waste generation from economic growth and further improve systems in order to address the challenge of achieving zero waste.

8. The diversification of waste streams and the growing presence of chemicals and hazardous elements in general waste streams further compound waste management challenges. Multi-stakeholder partnerships could bring much needed support to local authorities and public waste utilities, enhancing their capacity to tackle these challenges through various mechanisms and approaches, such as enhancing institutional and human capacity, research and information-sharing and technology transfer. Improving access to various investment and financial mechanisms would also relieve the burden on Government budgets.

9. Against this background, concerted efforts at the local, national and international levels to build effective partnerships for moving towards zero waste are essential. The intersessional conference held in Tokyo was organized with the following objectives: (a) to expand waste management services in developing countries; (b) to raise awareness about win-win opportunities for public-private partnerships; (c) to facilitate dialogue on building partnerships for waste management, including by sharing good models and practices of partnerships in waste management; (d) to identify and establish concrete, collaborative initiatives to ensure that needs are met with appropriate solutions; (e) to identify the necessary enabling conditions for successful public-private partnerships, especially regarding quality service that responds to demand, is cost-effective and is sustainable; and (f) to discuss and finalize the scope of a prospective international partnership with the objective of expanding the waste management services of local authorities and public waste utilities, to be launched during the nineteenth session of the Commission on Sustainable Development.

II. Opening remarks

10. In his opening speech, Ryu Matsumoto, Minister of the Environment of Japan, referred to the Japanese experience in overcoming a variety of serious waste problems and said that Japan provided excellent examples at both the local and national levels for improving waste management and reducing, reusing and recycling waste by developing partnerships among stakeholders. In the light of its experience, the Government of Japan recognized the need for, and the potential benefits of, developing and enhancing international partnerships for improving

waste management. Referring to the Regional 3R Forum in Asia, the regional platform recently established jointly by the Ministry of the Environment of Japan and the United Nations Centre for Regional Development, Mr. Matsumoto expressed the hope that the intersessional conference would pave the way to establishing and strengthening partnerships among the many stakeholders involved in waste management and provide meaningful input to the nineteenth session of the Commission on Sustainable Development and the United Nations Conference on Sustainable Development, to be held in Rio de Janeiro, Brazil, in 2012.

11. Abdelghani Merabet, Vice-Chair of the Commission on Sustainable Development at its nineteenth session, emphasized that moving towards zero waste could not be achieved without a strong partnership among States and all stakeholders and the awareness of civil society. He called for special attention to be paid to the critical challenges faced by developing countries, such as limited human and institutional capacity, technological capabilities and financial resources, and to the need for improved communication and greater commitment from all stakeholders in local areas.

12. Sha Zukang, Under-Secretary-General for Economic and Social Affairs and Secretary-General of the United Nations Conference on Sustainable Development, delivered a welcome address by video link. He underscored the need for a vision for managing urbanization. Citing waste management as an important theme of the Commission's nineteenth session, Mr. Sha urged participants in the intersessional conference to discuss zero waste issues, interim targets, the need for a registered partnership and linkages between waste management and sustainable consumption and production. He expressed his high expectations that the intersessional conference would demonstrate the critical role of waste management in promoting a green economy, urban development, employment creation and investment in the context of the United Nations Conference on Sustainable Development. In addition, Mr. Sha highlighted the key role that strengthening institutional frameworks played in empowering urban managers and fostering partnerships.

III. Turning waste into resources and economic opportunities

13. The concept of zero waste challenges the assumption that waste is inevitable and unavoidable and shifts the focus from end-of-pipe solutions and disposal practices to promoting the cyclical use of materials in the economy. Zero waste is a long-term vision in which a thriving society exists within nature's resource constraints and ability to assimilate waste.

14. Zero waste contributes to more than resource and environmental conservation. Parallel and complementary benefits include social and economic development, good governance, job creation, public health and community cohesion. The reduce, reuse and recycle and "circular economy" policies found in East Asia provide guidance for transitioning to zero waste, a change that cannot be achieved solely through end-of-pipe solutions.

15. The conversion of waste into resources and economic opportunities is a critical issue for all countries. While waste is a resource for some, the full economic potential of managing and utilizing waste as a resource has generally not been tapped into.

16. Numerous challenges need to be overcome, including the lack of reliable data and information and insufficient linkages between local authorities and the global recycling markets.

17. Converting waste into resources will generate employment, but legal and institutional frameworks, as well as education and awareness, are needed. In addition, consideration must be given to issues such as the right of access to basic services, carbon financing, secondary raw material and recycling markets, fiscal instruments and pricing mechanisms (including the clean development mechanism and extended producer responsibility), technological innovation and capacity development.

18. There are many success stories related to the reduction, reuse and recycling of waste at the community, regional and national levels. Environmental and public health protection and the creation of economic opportunities are key criteria for success.

19. Human capacity development and regional knowledge transfer networks, particularly among local authorities, should be prioritized so as to promote viable approaches. Sharing knowledge and experiences is an essential ingredient for sound policymaking.

20. Behavioural change is necessary in order to achieve the paradigm shift leading to zero waste. This will require participatory approaches and collaborative efforts that go beyond conventional education and awareness-raising.

21. Separating waste at the source reduces the quantity of waste requiring treatment and disposal and improves the quality and marketability of secondary raw materials, thereby contributing to local economic development, employment generation and improved working conditions, especially for people employed in the informal sector.

22. Waste offers a significant resource as an alternative source of energy. Consequently, the waste industry has an important role to play in reducing greenhouse gas emissions and providing cost-effective energy options.

IV. Empowering and developing the capacity of local authorities and public waste utilities

23. Local authorities require the resources and capacity to deliver services, either themselves, through a public waste utility, or through the private sector (whether through formal, community or informal channels). The institutional structure needs to be clear and coherent. The collection and management of data, both technical and financial, is vital. All professional staff, both administrative and technical, need to be trained and possess all the multidisciplinary skills and knowledge required. Continuity of high-level technical expertise is important.

24. High-level political commitment is instrumental in transforming waste management practices. Waste management services play an important role in protecting the public health and living environment of citizens and that role should be recognized.

25. In many cities, the community or the informal sector is already handling and recycling 20 per cent or more of the waste generated, at little or no cost to the local authorities. This important contribution of the informal sector needs to be recognized, along with the need to improve its working conditions.

26. Partnerships are vital for leveraging the delivery of waste management services. For example, collaboration between local authorities and land-use and economic development planners is valuable for identifying resource and waste management facilities. Local governments can consider reducing business taxes or fast-tracking permits for these types of businesses to foster their creation. Sites for landfills, transfer stations and other waste management infrastructure should be clearly designated in local and regional land-use plans. Inter-municipal cooperation should also be promoted in order to expand waste management services and disseminate successful models across regions.

27. A clear national policy and strategic framework is needed. Local authorities need to work with a clear strategic framework in order to create synergies among all stakeholders, including the private sector. This would also enable the raising of funds from banks and international donors.

28. Providing a service that is sustainable from a social, environmental and economic point of view is key. Communities, and in particular women, need to be included in both service planning and facility siting. Mechanisms need to be in place to measure customer satisfaction. Education and awareness promotion are critical.

V. Addressing new and emerging waste issues

29. The production and use of hazardous chemicals are increasing in developing countries. The waste stream is becoming more complex (e-waste, medical waste, household chemicals, batteries, etc.) and the capacity to manage it appropriately is lagging. Capacity-building for waste segregation needs to be prioritized so that hazardous materials can be kept out of the general waste stream and be treated safely. The collaborative efforts of national, regional and international bodies with the experience required to manage hazardous and/or chemical waste, such as standards agencies, research institutes and universities, should be promoted.

30. The presence of hazardous chemicals in various types of waste and the generation of such chemicals from improper waste treatment pose risks to health and the environment. Of special concern is the long-term presence in the environment of synthetic organic compounds such as persistent organic pollutants. It is vital to engage multilateral institutions and donor communities in financing waste-related technical cooperation projects that address emerging chemical issues and provide useful knowledge and practical training for local and national authorities.

31. Many transboundary movements of hazardous waste occurring today are illegal or are taking place in a legal grey zone. The frequent mixing of hazardous wastes with other kinds of waste and valuable resources poses particular management challenges to local authorities. Preventing the inappropriate transboundary movement of hazardous waste depends on effective measures being taken by both exporting and importing countries. Although the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

and related national legislation address this issue, there is an urgent need to build capacity at the local level in both importing and exporting countries in order to strengthen the enforcement of relevant provisions.

32. Because the demand for resources is rising and resources are becoming increasingly scarce, mechanisms are needed to encourage the environmentally and socially sound circulation of resources, at both the domestic and international levels. In this context, e-waste needs special attention, since it contains a number of strategic metals that get lost in the recycling processes typically used in developing countries and since it contains hazardous materials. Sustainable resource management requires advanced recycling technologies that can recover resources in an environmentally sound manner.

VI. Financial sustainability in municipal waste management

33. The world's waste management industry is estimated to be worth approximately €300 billion per year. The world is facing an increasingly acute shortage of primary resources, affecting the prices of secondary raw materials derived from waste, adding much instability to the industry's financial reserves. The demand for investment in municipal waste in urban areas over the next 10 years is projected to reach between €150 billion and €350 billion. It is also anticipated that there will be a significant demand for investment in the management of other waste streams, the recycling industry and the greening of production and consumption cycles.

34. Waste management should be placed higher on the financing agenda. Regional, national and international financial institutions could strengthen access to and create specific schemes to achieve zero waste.

35. Investments from international financial institutions only satisfy part of the demand. There is therefore a need to identify frameworks to leverage investment from other sources.

36. Investments generally flow to those countries that have the ability to attract, deliver and sustain investment. Investment financing can generally be found for projects for which there are sound data and a predictable stream of income can be identified clearly.

37. Gaps in investment demand are easier to close in large cities, where economies of scale increase the profitability of projects. Meeting the demand for investment is a real challenge in small towns and poor urban areas, which are characterized by small economies of scale.

38. National and local authorities should foster their investment climates by addressing key institutional and policy-related obstacles.

39. Financing instruments to address climate change such as the clean development mechanism, the Global Environmental Facility and the Green Climate Fund provide opportunities to meet some aspects of the demand for waste management services. However, there are still considerable financing gaps that need to be addressed. Waste management should mobilize such opportunities on a large scale. The clean development mechanism currently provides investments but only in

certain parts of the waste management chain. There is therefore the need for more easily accessible financing.

40. Producer responsibility is an important economic and policy instrument to provide incentives for reducing waste and injecting funds into the management of packaging and other special waste streams.

41. Capital investments and operation and maintenance costs need to be financed.

42. It is essential that the fees charged for the collection of waste be affordable. Linking such fees to utility bills and property tax has proved effective in certain cases.

43. Waste management is linked to many other investment sectors. Intersectoral approaches combining climate change, urban development, health, sanitation, land-use planning and urban transport should be encouraged.

44. Capacity within public waste utilities and local authorities should be strengthened in order to improve the bankability of projects and increase access to financing. The ability of waste management and recycling projects to generate revenue depends largely on the predictable availability of feedstock to facilities, which is why it is essential to have reliable data on the composition and quantity of material processed in different waste streams.

45. Small island developing States have particular investment needs. Well-tailored approaches are necessary due to land constraints, lack of local markets for recyclable materials, high energy costs, logistics and small economies of scale. Investment in appropriate technologies, including those developed locally, is crucial for the sustainability of waste management in small island developing States.

VII. Strategic approach to enhancing the participation of the private sector

46. At the intersessional conference, enhancing the participation of the private sector (including the formal and informal sectors and community-based organizations) in waste management was cited as important for the following reasons: to improve services and operations; to shift away from tax-based to user-paid systems; to reduce local government costs and create job opportunities; to create flexibility in operations and increase efficiency; and to provide creativity, productivity, technical know-how and experience, track records of success and access to capital.

47. The following key barriers to private sector participation in waste management were identified: lack of reliable data; lack of a holistic policy and regulatory frameworks; lack of practices for separating waste at the source; lack of funds; lack of clear procedures for private sector involvement, such as procedures for granting permits; and the limited capacity of local authorities to engage the private sector.

48. In the light of such barriers, participants in the intersessional conference recommended taking the following key actions to enhance the participation of the private sector in waste management: building incrementally on success; developing partnerships based on local capacity; compiling and making available reliable, solid data on waste and forecasts for future changes; and ensuring clarity and

transparency in the contract procedures in order to better assess and share the risk and benefits among the private and public sectors.

49. Viable business models need to be developed to attract private sector investment. Risk-sharing mechanisms with a strong social component addressing the needs of vulnerable sections of society, such as pro-poor public-private partnerships and microfinancing schemes, particularly those that support informal groups and non-governmental organizations, should be promoted.

50. Local and national governments should develop and implement upstream and downstream measures. Such measures could include programmes to promote the reduction, reuse and recycling of waste; bans on substances (e.g., mercury), products and technologies; take-back provisions; green purchasing; and deposit-refund programmes.

VIII. Partnerships as the basis for sustainable waste management

51. The industrial and agricultural value chains and the markets that drive resource recovery and ultimately make such recovery possible existed before municipal recycling. Those chains and markets now exist in an uneasy alliance with both municipal recycling and the even newer institutional landscape of extended producer responsibility, and are likely to continue to persist in the future. The so-called "commodities face" of recycling retains its own structure, institutions, practices and market. There is a need to create a dynamic and effective platform to promote partnerships between different stakeholders such as public waste utilities, the private/business sector, the informal sector and communities.

52. The contributions of the informal sector to the value chain of waste management must be recognized and acknowledged. Over time, a strategic framework will be needed to transform the informal sector. Government should help and encourage the formation of associations and cooperatives in the informal sector. Direct financial support from the Government for formalizing the informal sector is necessary in certain cases.

53. In the light of the substantial time necessary to bring attitudinal and behavioural changes in communities towards zero waste, partnerships are needed to foster consultative processes, especially between communities in the areas immediately adjacent to waste management facilities. Such partnerships help to improve waste segregation and generate employment opportunities while also fostering the social acceptability of treatment operations.

54. Partnerships at different levels and involving different stakeholders are urgently required to holistically and comprehensively address a wide variety of issues. In that regard, participants in the intersessional conference identified the need to create new partnerships and expressed appreciation to the Department of Economic and Social Affairs and the United Nations Centre for Regional Development for initiating an international partnership for expanding the waste management services of local authorities. That partnership will complement and act in synergy with the global partnership on waste management of the United Nations Environment Programme.

55. The participants in the intersessional conference unanimously endorsed the establishment of an international partnership for expanding the waste management

services of local authorities, to be launched during the nineteenth session of the Commission on Sustainable Development, in May 2011 (see annex). The participants extended their gratitude to the Asian Institute of Technology, located in Bangkok, for hosting the global secretariat of the international partnership. The partnership will be implemented as a decentralized network of multiple stakeholders serving the needs of public waste utilities. A number of representatives of institutions, Governments and non-governmental organizations expressed a keen interest in joining the international partnership in various roles, for example by acting as a regional, subregional or national secretariat.

IX. Way forward

56. Zero waste is a powerful new paradigm that needs to become central to policymaking at the local, regional, national and international levels. It represents a long-term vision in which a thriving society exists within nature's resource constraints and ability to assimilate waste.

57. Moving towards zero waste is inherently a multi-stakeholder process that calls for partnerships within and between communities, businesses, industries and all levels of government. Including all stakeholders in the process of formulating and implementing policies, strategies and plans is essential to creating the conditions for sustainable partnerships to flourish, and international attention on this issue is urgently required.

58. In the light of major funding gaps, dedicated financial mechanisms that complement existing funding sources need to be considered. These might include the extension of carbon financing to the recycling of different material streams or the wider implementation of extended producer responsibility or technological innovation that generates additional value from waste streams.

59. Policy, legal and institutional frameworks need to be strengthened. Developing the capacity of local and regional authorities to prepare and implement bankable investment projects is critical.

60. The international partnership for expanding the waste management services of local authorities should strengthen the knowledge base and promote good practices and exchange of experiences between local and regional authorities.

61. Zero waste needs to be recognized on the political agenda as a prerequisite for fostering a green economy and promoting the required changes in existing institutional arrangements.

Annex

International partnership for expanding the waste management services of local authorities

1. The local authorities of emerging and developing economies suffer from capacity constraints in terms of technology and the financial, institutional and policy aspects of developing a waste management infrastructure and associated services. The rising volume and complexity of waste streams are posing challenges to local authorities and threatening human health, the ecosystem and the security of resources. An international partnership for expanding the waste management services of local authorities that focuses on networking among local authorities across the world is necessary for responding to these challenges. Such an international partnership should stress the link between waste and resources and aim to connect all key stakeholders through knowledge networks following the principles of integrated solid waste management and strategies such as those that promote reducing, reusing and recycling waste.

2. The proposed international partnership is to be structured to represent a knowledge network that emphasizes practice. The mission of the partnership will be "to share knowledge, communicate across national boundaries and work to spread best practices in order to accelerate the uptake of waste-related infrastructure and services at various stages of waste management such as avoidance, prevention, minimization, segregation, collection, transport, recycling, recovery, reuse treatment and disposal". The partnership's primary objectives will be:

(a) To enable local authorities to share experience about institutional, business and financial models that have been successful in addressing specific waste problems and opportunities;

(b) To help in mainstreaming integrated and sustainable waste management strategies such as those involving integrated solid waste management and the reduction, reusing and recycling of waste;

(c) To facilitate the expansion of waste management-related services and support infrastructure that caters to local authorities' needs and complies with applicable regulations, identifies partners and appropriate financial mechanisms for the operation of facilities, creates "green" jobs and stimulates "green" investments;

(d) To encourage awareness-raising and capacity-building programmes targeting local authorities and other stakeholders, especially so as to decouple waste generation from economic development and to manage complex and emergent waste streams;

(e) To assist in creating a practice-oriented knowledge network to help formulate innovative projects, select most appropriate technologies, access expertise, promote waste exchange and make the best use of waste-resource-related opportunities;

(f) To be instrumental in the collation of data on waste generation, technology performance and standards, benchmarks and key performance indicators for gap assessments and target setting for local authorities;

(g) To provide a platform for local authorities to give feedback to enhance and modernize the national policy framework.

3. The international partnership will have an international secretariat guided by an advisory board and be supported by regional and subregional secretariats. Thematic working groups may be constituted by inviting facilitating organizations that will make contributions to the knowledge pool of the partnership on an honorary basis. Facilitating organizations will interact with local authorities in the form of an "ecosystem" that may include knowledge-based institutions, State/national-level urban development departments, non-governmental organizations, community-based organizations, waste pickers' associations, financing institutions, technology and service providers and industries, and other alliances related to waste management. The thematic working groups will cover cross-cutting themes such as financing, training, practice research, policy and regulations and may focus on specific waste streams, as well as e-waste, health-care waste, plastic waste and the like. In addition, local authorities from high-income countries could share their experience and provide knowledge to local authorities from low- and middle-income countries. The structure of the partnership will be non-hierarchical and flexible in order to promote direct interactions between local authorities on a global basis.

4. Web portals, workshops, regional and international events, training and awareness programmes and innovative pilot projects are some of the tools and mechanisms that the international partnership will use to help local authorities network among each other. Monitoring arrangements and performance indicators to check the performance of the partnership will be put into place to ensure that the partnership's activities are geared towards the goal of zero waste.

5. Membership in the international partnership will be open to all. All members should be in complete concurrence with the partnership's mission and goals. Membership in the partnership will be of five types: local authorities, thematic working group members, individuals and organizations, regional secretariat and subregional secretariat. Although the partnership will be unique in terms of focusing specifically on local authorities, it will draw on synergies with existing international initiatives and partnerships on waste management. In this manner, the partnership will ensure that there are no overlaps or duplication, and that the relationship with other initiatives will be complementary.